

STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION

CONSTRUCTION DIVISION

SUITE 700, JAMES K. POLK BUILDING 505 DEADERICK STREET NASHVILLE, TENNESSEE 37243-1402

CLAY BRIGHT COMMISSONER BILL LEE GOVERNOR

October 12, 2020

Re: ADDENDUM #4

Contract No.: DB2001 County: Williamson

To Whom It May Concern:

This addendum revises the RFP Contract Book 1 and 3. Attached are the revised sheets.

You must acknowledge this addendum by completing the "Addendum Letter Acknowledgement form C and the Technical Proposal Signature Page (Form TPSP) within your Technical Proposal. It is the bidder's responsibility to notify all affected manufacturers, suppliers and subcontractors of this change.

Sincerely,

Lia Obaid, P.E.

Assistant Director of Construction

Construction Division

DESIGN-BUILD RFP CONTRACT BOOK 1 INSTRUCTIONS TO DESIGN-BUILDERS (ITDB)

TENNESSEE DEPARTMENT OF TRANSPORTATION

INTERSTATE 65 INTERCHANGE AT BUCKNER ROAD IN SPRING HILL, TN

WILLIAMSON COUNTY- TENNESSEE

CONTRACT NUMBER: DB2001



July 17, 2020

Addendum #1 August 21, 2020

Addendum #2 September 11, 2020

Addendum #3 September 29, 2020

Addendum #4 October 12, 2020

The Design-Builders shall not contact stakeholder staff regarding the RFP content or the requirements for the Project. Stakeholder staff includes employees of the Department, city(ies) and county(ies) in which the Project or any part of it are located.

Prohibited communications do not include contact with regulatory/county/city/utility officials for the limited purpose of obtaining information regarding available detour routes and conditions associated with such use or regulatory/county/city guidelines.

5. PROCUREMENT SCHEDULE/SUBMITTAL DEADLINES

The Procurement Schedule and submittal deadlines are set out below. The Department will not consider requests on any submittal received by the Department after the deadline for its submittal date stated below. The Department will not consider requests on any submittals pertaining to an Addendum after the deadline established in the Addendum.

Confidential (One on One) Meetings with Each Proposer	Week of August 3, 2020		
Deadline for Submittal of Alternate Technical Concepts	On or before September 18, 2020 4:00 p.m., CT.		
Deadline for Response to Alternate Technical Concepts	September 28, 2020 4:00 p.m., CT.		
Deadline for Submittal of Initial Lighting Design , and Right Of Way Acquisition (Exhibit)	October 23, 2020		
Deadline for Response Initial Lighting Design , and Right- Of-Way Acquisition (Exhibit)	October 30, 2020		
Deadline for Submittal Right-Of-Way Acquisition (Exhibit)	October 30, 2020		
Deadline for Response Right-Of-Way Acquisition (Exhibit)	<u>November 6, 2020</u>		
Deadline for Submittal of Question Requests, and Requests for QPL Determination	November 29 , 2020 4:00 p.m., CT.		
Technical Proposal and Price Proposal Due Date and Time	November 20 December 4, 2020 4:00 p.m., CT.		
Price Proposal Opening	December 18, 2020 9:00a.m., CT.		
Anticipated Award of Design-Build contract, or rejection of all proposal	On or before January 8, 2021		
Anticipated Issuance of Initial Notice to Proceed	January 22, 2021		

The Department will not consider any late Proposals. Proposals received after the Proposal Due Date will be returned to the unopened. The Department will not consider any Proposal modifications submitted after the Proposal Due Date. Nor will the Department acknowledge Proposal withdrawals submitted after the Proposal Due Date. Any such attempted withdrawal will be ineffective.

105-01.55 Design-Build Design Services

(All Design Activities shall be included in this item.)

- Definitive Design and Reviews
- Readiness-for-Construction Plans and Reviews, Specification and quantity estimates
- Working Drawings
- As-Built Plans and Reviews

105-08.20 Design-Build Contract Management

- Project Administration
- Project progress (scheduling)
- Contract progress submittals for payment

109-04.50 Design-Build ROW Services

- Appraisal
- Acquiring
- Public meetings, if required

109-10.01 Trainee

Trainee at the unit price \$0.80 per hour for each hour approved training provided, as indicated in SP1240

203-01.95 Design-Build Grading & Roadways

- Road and Drainage excavation
- Borrow excavation (rock)
- Borrow excavation (other than solid rock)
- Undercutting
- Guardrail and Median Barrier

203-50 Construction of Haul Road

- Maintenance/Access Road
- Haul Road

203-50.50 Construction of Access Road

Access Road

Note, Item No. 203-50.50 shall include all costs associated with providing access to Tracts 17 and 32 per Contract Book 3 Section 3.11. If it is determined during ROW acquisition that this item is not needed, the Department will reduce the lump sum contract amount by the amount bid for Item No. 203-50.50.

204-05.50 Design-Build Geotechnical

- Borings
- Geotechnical Investigations
- Any Sinkholes

209-01.50 Design-Build Environmental Management

- EPSC measures, EPSC installation
- EPSC inspections
- Permit Acquisitions

that is necessary to complete the Contract obligation. A certified DBE may participate as a Design-Builder, subcontractor, joint venture member, material supplier, material manufacturer, or professional service provider.

- Identify DBE and EEO representatives and their roles and responsibilities and identification of specific strategies and approaches that will be taken by the Design-Builder to meet the requirements of the Affirmative Action and Equal Employment Opportunity provisions described in **Design-Build Standard Guidance**.
- The Design-Builder will also be responsible for fulfilling FHWA 1273 "Contract Provisions"

d. ENVIRONMENTAL COMPLIANCE

- 1) Identify any potential environmental impacts.
- 2) Describe or outline the process for environmental compliance.
- 3) Describe or outline the approach to Erosion Prevention and Sediment Control for the Project.
- 4) Describe or outline the understanding of the overall approach to permitting and the comfort level with obtaining the required permit application/ modification within the allowed timeframe.
- 5) Identify innovative approaches to minimize any impacts in environmentally sensitive areas.

e. INNOVATION

- 1) Identify any design or construction solutions that the Design-Builder considers innovative and how those solutions will better serve the Project. Include a description of ideas that were considered, whether implemented or not. If this is an alternate technical concept, include only approved ATCs.
- 2) Identify any potential innovative traffic control and how those solutions will better serve the Project. Describe any temporary impacts associated with innovations.
- 3) Will these innovations add to, subtract from, or have no effect on the costs?

4. RESPONSE CATEGORY IV: TECHNICAL SOLUTIONS

Submit as much of the following for Evaluation on form Response Category IV form in **Appendix A** (be as specific as possible):

- a. It is not the intent of the Department for the Design-Builder to submit design plans. The details submitted shall be of sufficient detail to illustrate color, texture, pattern, emblems, proportion, corridor consistency, complementing details, or other such visual effects. For those details used in multiple locations, typical details will suffice with the locations for their use noted in narrative or graphic form.
- b. Conceptual plans, drawings, etc. within the Technical Proposal (these plans are in addition to and are separate from the ROW Acquisition sheets required in **Contract Book 3 (Project Specific Information)**) shall include at a minimum the following:
 - 1) Show plan view of design concepts with key elements noted. Define all proposed lanes, turning movements, gore locations, intersection locations, bridge limits, access roads, and dimensions.

- 2) Provide preliminary interchange lighting design. Information shall include electronic design files using AGi32 software, layout sheets which illustrate the photometrics, and high mast foundation. See **Contract Book 3** (**Project Specific Information**) Section 5.2 for more information.
- 3) Show preliminary drawing of bridge elements.
- 4) Identify preliminary horizontal and vertical alignments of all roadway elements.
- 5) Show typical sections for the mainline of the Project.
- 6) Identify drainage modifications and designs to be implemented.
- 7) Identify the appropriate design criteria for each feature, if not provided.
- 8) Identify all bridge types to be constructed, including any special design features or construction techniques needed.
- 9) Identify any deviations or proposed design exceptions, from the established design criteria that will be utilized. Explain why the deviation is necessary.
- 10) Describe any geotechnical investigations to be performed by the Design-Builder.
- 11) Describe how any utility conflicts will be addressed and any special utility design considerations. Describe how the design and construction methods minimize the Department's utility relocation costs.
- 12) Describe how the design will affect the right-of-way costs.
- 13) Identify types of any retaining walls and/or noise walls, if applicable.
- c. The Technical Proposal shall include half-size plan sheets depicting those elements required by the RFP.
- d. Describe any traffic control measures that will be used for each construction phase.
- e. Describe how traffic will be maintained as appropriate and describe understanding of any time restrictions noted in the RFP.
- f. Describe the safety considerations specific to the Project.
- g. Discuss overall approach to safety.
- h. Describe any proposed improvements that will be made prior to or during construction that will enhance the safety of the work force and/or traveling public both during and after the construction of the Project.

5. INITIAL LIGHTING DESIGN AND RIGHT-OF-WAY ACOUISITION EXHIBIT SUBMITTAL

An Initial Lighting Design and Right-of-Way Acquisition Exhibit submittal containing Item 4.b.2) above and the Right-of-Way Acquisition Sheets is required and is to be submitted in accordance with the Procurement Schedule in Adobe PDF electronic format. Right-of-Way (ROW) Acquisition Sheets comprise the ROW Acquisition Table including all proposed areas of right-of-way and easements for each segment (LIC No. 1, Interchange, and LIC No. 2) and in the format depicted in the Functional Plans along with Property Maps or Present Layouts as needed to clearly depict the proposed acquisitions. The Design-Builder's Initial Right-of-Way Acquisition Exhibit shall also include its proposed design of the access road described in Contract Book 3 (Project Specific Information) Section 3.11. The Department will respond with comments in accordance with the Procurement Schedule. The technical proposal shall include Item 4.b.2) above along with the ROW Acquisition Sheets with any comments received from the initial design exhibit review addressed.

DESIGN-BUILD RFP CONTRACT BOOK 3 PROJECT SPECIFIC INFORMATION

TENNESSEE DEPARTMENT OF TRANSPORTATION

INTERSTATE 65 INTERCHANGE AT BUCKNER ROAD IN SPRING HILL, TN WILLIAMSON COUNTY- TENNESSEE

CONTRACT NUMBER: DB2001



July 17, 2020

Addendum #1 August 21, 2020 Addendum #2 September 11, 2020 Addendum #3 September 29, 2020

Addendum #4 October 12, 2020

- TDOT Structural Design Memorandums SMO-05 dated July 28, 2016, SMO-31 dated October 31, 2014, and SMO-55 dated November 24, 2014;
- TDOT Bridge Plans Notes dated March 11, 2020;
- Buckner Road Traffic Data developed by the Department's Project Planning Division, dated November 14, 2019;
- Interstate 65 at Buckner Road Interchange Traffic Data, dated January 8, 2020.
- Preliminary Report of Geotechnical Exploration, dated December 4, 2019 (for information only);
- Pavement design (see Appendix A), dated September 2, 2020;
- TDOT 2017 Procedures for Providing Offsite Waste and Borrow on Construction Projects (May 15, 2017 edition);
- Lighting Specifications;
- Bridge Aesthetics Renderings;
- Typical Structural Repair Details;
- Pedestrian Barrier Rail Details;
- Median Island Details
- City of Spring Hill Resolution 20-47;
- Pavement Evaluation Report;
- Culvert Inspection Reports;
- City of Spring Hill Traffic Systems Specifications; and
- Generic Bridge Load rating assignment letter (for information only).

The Design-Builder shall verify existing survey and provide all updated surveys, mapping, plans, verification of existing utilities, investigation, survey data file, and analysis required for completion of the work.

By submitting a response to this RFP, the Design-Builder acknowledges and agrees that TDOT does not make any warranties or representations as to the accuracy or completeness of the provided survey and geotechnical data. The Design-Builder shall bear the risk for any changes in its design or construction resulting from its failure to verify the survey and geotechnical data provided by the Department.

The Design-Builder shall adhere to all commitments stated in the NEPA document. The Design-Builder shall acknowledge that materials furnished by the Department are preliminary and provided solely to assist the Design-Builder in the development of the project design. The Design-Builder shall be fully and totally responsible for the accuracy and completeness of all work performed under this contract and shall hold the Department harmless and shall be fully liable for any additional costs and all claims against the Department which may arise due to errors, omissions and negligence of the Design-Builder in performing the work required by this contract.

1.4 DBE GOAL

The assigned DBE goal for this Project is 14.0%.

future ramps, cross walks, pedestrian push-buttons, and sidewalks/multi-use paths within the crossover limits for the Department's concurrence. These areas shall be marked "By Others" in the Design-Builder's plans. The conduit and pull boxes (see Section 5.0) to be installed shall also be identified in the Design-Builder's plans.

If temporary construction activities disturb the existing pavement or pavement markings beyond the limits defined in Section 3.1, the Design-Builder shall extend the mill and overlay and restriping limits to include those areas.

The Design-Builder shall use 3:1 slopes or flatter with necessary recovery area to limit the amount of guardrail installed along Buckner Road. The use of 2:1 slopes along Buckner Road should be used based on Case II slopes as applicable within the interchange access control and only by approved Alternate Technical Concept along Buckner Road.

Where overhead sign supports fall on the side slopes outside the ROW, the Design-Builder's design shall accommodate a notch in the proposed ROW to provide a ten (10) foot perimeter around the overhead sign support foundation.

The Owner of Tract 15 is installing steel casings to accommodate future water and sewer lines for future development. These casings will extend between the toes of slopes shown in the Functional Plans. They will be located at STA 112+02 and 112+32 of Buckner Road with a top of casing elevation of 778.50 and skewed 90 degrees with the Buckner Road centerline. The Design-Builder's vertical profile shall be sufficient to provide a minimum of two feet of cover between the casing and the pavement base stone.

The Design-Builder shall plan and schedule all work, submittals, and reviews necessary to obtain the Department's written acceptance of sealed Definitive Design Plans for the portion of the project affected by the relocation of the AT&T line and private easement no later than May 1, 2021. The Design-Builder shall allow for 18 months after Definitive Design acceptance in their CPM schedule for the relocation process of the AT&T line.

3.3 DEVIATIONS AND EXCEPTIONS

All proposed modifications require an Alternative Technical Concept (ATC) subject to Department approval. The Design-Builder shall not request more than eight ATCs.

Deviations from the Functional Plans horizontal alignment (greater than 10.0 feet) for Buckner Road, Interstate 65, all ramps, or Lewisburg Pike will require an ATC with Department approval. The Design-Builder is responsible for any impacts resulting from deviations from the Functional Plans. ATCs shall identify the limits of Segment Nos. 1, 2, and 3 identified in Section 3.1 for approval by the Department.

The Design-Builder shall identify and label any adjustments made to the taper locations and/or typical sections identified in Section 3.2 or the Functional Plans in their ATC submittal for approval by the Department.

No ATC will be considered that:

- Changes the interchange configuration from a diverging diamond;
- Changes the pavement design from that shown in Appendix A;
- Requires earthmoving or other ground disturbing activities including staging of heavy equipment, excavation of borrow materials, and vegetation removal below the natural ground surface in the

areas designated as "Approximate Sensitive Environmental Area" identified in the Functional Plans;

- Places the eastern crossover in such a manner that access to any Tract 33 or 34 is lost; or
- Proposes the elimination of or reduction in width of the grass strips.

No design exceptions shall be allowed.

3.4 GUARDRAIL AND BARRIERS

The proposed guardrail, including any anchor system, shall be installed prior to opening traffic. Existing guardrail within the construction limits shall be upgraded to current standards. Guardrail shall be removed and replaced in accordance with the TDOT Standard Drawings and the January 2015 edition of TDOT Standard Specifications.

All permanent and temporary safety appurtenances (sign supports, guardrail, barrier rail, impact attenuators, etc.) shall meet current TDOT standards and shall have all required Department certification documents.

All existing and new guardrail, guardrail attachments to bridge ends and/or concrete barriers, and end terminals within the project limits shall be MASH-compliant TL-3 and be on the Department's Qualified Products List.

The Design-Builder shall construct a median refuge as shown on Standard Drawing MM-CR-4 at the crossover locations to allow for future pedestrian facilities along Buckner Road. The pedestrian barrier on the bridge over Interstate 65 shall be constructed as per the details provided on the project website. The end of the vertical taper shall be placed such that the 14'-0" clear zone to the adjacent lane is provided. The pedestrian barriers on the left and right of centerline shall terminate at the same location. 6" raised concrete median shall be constructed between the shared-use path and the shoulder within the crossovers. The Design-Builder shall construct concrete barrier walls in accordance with the S-SSMB series of TDOT Standard Drawings.

Required guardrail and concrete barrier locations shall conform to the Design Guidelines, TDOT Standard Drawings, and/or the AASHTO *Roadside Design Guide*. All proposed guardrail along Buckner Road shall be placed at the location required to accommodate the future sidewalk and multi-use path (see Standard Drawing S-PL-6). Right-of-way shall be notched such that proposed guardrail and terminals are within the proposed right-of-way.

3.5 DRAINAGE

The Design-Builder shall be responsible for design and construction of the entire stormwater management system within the Project limits and shall adhere to the latest edition of the TDOT *Drainage Manual*. The Design-Builder shall utilize a 10-yr frequency for the stormwater system design, a 50-yr frequency for crossings where Q50 is less than 500 cfs and 100-yr for crossings and encroachments for which Q50 is greater than 500 cfs. The design storm is the storm at which the flood elevation equals the roadway overtopping elevation. If design storm is greater than 100 year then 100-yr event should be reported. The Design-Builder shall utilize a 50-yr frequency for stormwater system design along Interstate 65.

All stormwater runoff that flows through the Project, whether originating within or outside of the Project, must be accounted for in the design of the Drainage System. The project drainage shall function independently of adjacent projects. Inlets and ditches shall not drain onto or through existing or future roads or drainage systems excluding the culverts along Interstate 65.

For the overhead sign structures immediately before and after the bridge over Interstate 65 (approximately STA 150+20 and STA 153+40 in the Functional Plans), the Design-Builder has the option of spanning the entire roadway or constructing a median support as shown on Std. Dwg. S-SSMB-8. If the Design-Builder elects to construct the S-SSMB-8 median support, it shall provide a minimum of one foot from the toe of the support to the adjacent travel lane. The S-SSMB-8 median support may encroach a maximum of one foot into the shared use path. The horizontal and vertical tapers between the S-SSMB-8 barrier and the pedestrian barrier shall be 20:1 and 6:1, respectively.

3.8 GROUND SURVEY

The ground survey including survey control will be provided by the Department.

The Design-Builder shall verify the ground survey and survey control before utilizing in the design of the project (see Section 1.3). In addition, the Design-Builder shall be responsible for field surveys and support activities, such as, but not limited to geotechnical investigations, ROW stakeout, construction stakeout, etc.

If the Design-Builder's design footprint extends beyond the limits of the survey provided by the Department, the Design-Builder shall be responsible for securing the necessary additional survey.

All field survey activities shall be performed in accordance with the latest version of the TDOT Survey manual and any other applicable design standards previously referenced

3.9 PAVEMENT DESIGN

The Pavement Design Report for this Project has been developed by the Department and is located in Appendix A.

Prime Coat and Tack Coat are required and shall be applied as part of the Project.

3.10 PAYMENT FOR SELECT QUANTITY OVERRUNS

The following table is provided to cover select quantities that are above those anticipated in the scope. When the Design-Builder utilizes any item in the table below, he must provide the Department with an invoice detailing the location, purpose, and quantity used, for tracking purposes. Failure to provide invoices throughout the progress of the project may result in nonpayment for overrun quantities.

ITEM	ТҮРЕ	UNIT	UNIT PRICE	QUANTITY
Temporary Traffic Control	Changeable Message Sign Unit	EACH	\$6,500	Signs exceeding 6

3.11 DESIGN REQUIREMENTS FOR ACCESS ROAD

The Design-Builder shall construct an access road to allow for access to Tracts 17 and 32.

The typical section for the access road to Tracts 17 and 32 shall be designed per Std. Dwg. RD11-TS-1 using a design speed of 20mph. The typical section shall consist of two 10' lanes with no shoulders.

A median opening along Buckner Road shall be provided at the intersection with the access road. The intersection of the access road shall fall outside of the controlled access fence.

The pavement design for the access road shall be Mix Type IV as described in Table 3-3 of the TDOT Design Guidelines.

The pavement markings for the access road shall be provided according to Section 4 of the TDOT Design Guidelines and TDOT Standard Drawings.

The access road shall end with a cul-de-sac with a ninety-six foot minimum outside diameter.

A private driveway to Tract 17 and a field entrance to Tract 32 shall be provided.

The Design-Builder shall be responsible for preparing any additional environmental technical studies and completion of the NEPA document reevaluation(s) if its design falls outside the construction limits shown in the NEPA document.

The Design-Builder shall be responsible for preparing and obtaining required permits.

The Design-Builder's access road design shall be submitted with the Initial Right-Of-Way Exhibit Submittal and in the Technical Proposal with Response Category IV (TECHNICAL SOLUTIONS) information with TDOT comments to the initial submittal addressed. See Contract Book 1 (Instructions to Design-Builders). This submittal shall include the horizontal alignment, vertical alignment, and proposed ROW acquisition areas.